

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Yoram REITER

Serial No.: 10/075,257

Filed: 02/15/2002

Group Art Unit: 1644

For: SINGLE CHAIN CLASS I
MAJOR HISTOCOMPATIBILITY
COMPLEXES, CONSTRUCTS
ENCODING SAME AND METHODS
OF GENERATING SAME

Examiner: Vandervegt, Francois P

Attorney
Docket: 02/23338Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**DECLARATION OF YORAM REITER UNDER 37 CFR 1.132**

I am presently employed as researcher at the Technion Institute of Technology, Haifa Israel, Department of Biology, where I am a professor of Molecular Immunology and head of the laboratory of molecular immunology. I am also the dean of the Faculty of Biology at the Technion. I received my Ph.D. degree from the Weizmann Institute of Science in 1993, worked as a post-doctoral fellow in the laboratory of molecular biology at the National Cancer Institute, National Institutes of health in Bethesda Maryland where I developed new approach to targeted therapy of cancer.

My research focuses on molecular immunology of cancer with the emphasis of developing new antibody-based molecules for targeted therapy of cancer. Since the beginning of my career, I have published 70 scientific articles in highly regarded journals and books, and have presented my achievements at many international scientific conferences.

I am a member of the American Association of Immunologists, the American Association for Cancer Research, the Israel Immunology Society, and was awarded several research prizes including the US government technology transfer award, the

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Rothschild Foundation post doctoral award, the Alon fellowship award for outstanding young scientist administered by the Israel council for higher education, the Teva Prize for research, The Yuludan and Taub prizes for excellence in research. I was elected recently to the editorial board of pharmaceutical design and serve as a reviewer for many journals such as the Journal of Immunology, Cancer Research, Journal of Immunological Methods and more.

I am a co-inventor of the subject matter claimed in the above-referenced U.S. patent application.

I have read the Official actions issued with respect to the above-identified application.

In this Official action, the Examiner has rejected claims 5-14 under 35 U.S.C. § 103(b) as being unpatentable over Altman in View of Matsumura.

Attached is an Appendix with a graph depicting the intensity values of the MHC class I-peptide complexes of Matsumura as measured using a densitometer from Figure 1D of Matsumura et al., which demonstrates by extrapolation the complete breakdown of the MHC class I-peptide complex of Matsumura et al., at a temperature of 55 °C.

This graph conclusively shows that the MHC class I-peptide complexes of Matsumura et al. were unstable at a temperature higher than 47 °C, let alone at a temperature of 60 °C.

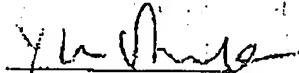
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

11 June, 2007



Yoram Reiter

Enc.:

CV of Yoram Reiter

CURRICULUM VITAE (January 2007)

YORAM REITER

ACADEMIC DEGREES:

1/1993 Ph.D Department of Chemical Immunology, The Weizmann Institute of Science, Rehovot, Israel.
Supervisor: Prof. Zvi Fishelzon

2/1987 M.Sc Department of Chemical Immunology, The Feinberg Graduate School, The Weizmann Institute of Science, Rehovot, Israel.
Supervisor: Prof. Zvi Fishelzon

8/1984 B.Sc Biochemistry, Tel Aviv University, Faculty of Life Sciences, Tel Aviv, Israel.

ACADEMIC APPOINTMENTS

7/2003-Present Associate Professor, Faculty of Biology, Technion-Israel Institute of Technology, Haifa, Israel

10/1998-7/2003 Senior Lecturer, Faculty of Biology, Technion-Israel Institute of Technology, Haifa, Israel.

PROFESSIONAL EXPERIENCE:

8/1997-9/1998 Senior Scientist, Peptor Ltd. Kiryat Weizmann, Rehovot, Israel

1/1993- 7/1997 Research fellow, Laboratory of Molecular Biology, Division of Basic Sciences, National Cancer Institute National Institutes of Health, Bethesda MD.
Supervisor: Dr. Ira Pastan

RESEARCH INTERESTS:

Molecular Immunology

1. Recombinant antibody fragments for cancer immunotherapy and diagnosis.
2. Recombinant antibodies for studying anti-tumor and anti-viral immune responses
3. Antibody phage display libraries for the isolation of novel reagents for targeting cancer and autoimmune disorders.
4. Recombinant MHC molecules and their use.

5. Molecular mechanisms of T cell function and regulation.
6. Protein engineering of recombinant antibody and T-cell receptor Fv fragments.

TEACHING EXPERIANCE:

1. 1986, Teaching assistant, Laboratory courses: basics of Biochemistry. The Feinberg Graduate School of The Weizmann Institute of Science, Rehovot, Israel.
2. 1987-1992, Teaching assistant, Laboratory courses: Basics of Biochemistry and Laboratory course in Immunology, The Feinberg Graduate School of The Weizmann Institute of Science, Rehovot, Israel.
3. 1998, Pharmaceutical Biotechnology and Drug Discovery, (Graduate course), Faculty of Biology, Technion.
4. 1999- Present, Biochemistry (Responsible teacher) (Undergraduate, 350 students), Faculty of Biology, Technion.
5. 2000, Cell Biology, (Undergraduate), Faculty of Biology, Technion.
6. 2000, Advanced Molecular Biology (Graduate course), Faculty of Biology, Technion.
7. 2001-present, Advanced Molecular Biotechnology, (Undergraduate and Graduate) Design and supervision of a new course. Faculty of Biology, Technion.

TECHNION ACTIVITIES

2004-2006, Head of Graduate Studies, Faculty of Biology, Technion-Israel Institute of Technology

2005-2006, Member of the Technion Thesis Evaluation committee, Technion Graduate School, Technion

2005-Present, Head of Technion committee for construction of central animal facility

2005- Member of the Management Committee, The Russell Berrie Nanotechnology Institute, Technion

2006- Present, Dean, Faculty of Biology, Technion-Israel Institute of Technology

PUBLIC PROFESSIONAL ACTIVITIES

Professional committees and responsibilities

1999, 2001, 2002 Member of the Scientific Advisory Board for Grants in Cancer Research, Ministry of Health, Jerusalem, Israel

1999-2001 Member of Scientific Advisory Board, Immunology Section, ISF- Israel Science Foundation, Israel academy of science, Jerusalem, Israel.

2000- Member of Scientific Advisory Board on Cancer Immunotherapy, Sharet Institute for Oncology, Hadassah Medical Center, Jerusalem, Israel.

2002-2003 Organizing committee and scientific committee, 32nd Annual Meeting of the Israel Immunology Society.

2003 Chairman, Advisory Board for Grants in Cancer Research, Ministry of Health, Jerusalem, Israel

2003- Scientific advisory board (SAB), Viventia Biotech. Ltd, Toronto, Canada

2004- Scientific advisory board (SAB), The Ella Institute for Treatment and Research of Melanoma, Sheba Medical Center.

2004- Member of the board of directors, Israel Immunology Society

2005- Member of the Management Committee, The Russell Berrie Nanotechnology Institute, Technion

2005- Member of the Scientific Advisory Board, National Council for Biotechnology, MOST-Ministry of Science and Technology

2006- research Member of Scientific Evaluation Committee, Infrastructure Program for Biotechnology, Ministry of Science

2006- and Member of Scientific Evaluation Committee, Eshkol Fellowships Grants in Gene Silencing, Ministry of Science.

Editorial responsibilities:**Associate Editor – International Reviews of Immunology.**

Reviewer: Journal of Immunology, Immunity, Cancer Research, International Journal of Cancer, Nature Medicine, European Journal of Immunology, Journal of immunological Methods, Immunology, Acta Biochimica et Biophysica, Nature Biotechnology, Protein Engineering, Structure, Clinical Cancer Research, Journal of Biological Chemistry.

Other professional responsibilities:

Founder – Founder of BioMimic Ltd. A bio-pharmaceutical start-up company (2004)
Founder of AIT-Applied Immune Technologies Ltd. A bio-pharmaceutical R&D company (2006)

Consulting- Scientific consultation to various biotechnology and pharmaceutical companies including: Viventia Biotech Ltd, Canada; Teva Pharmaceuticals, Israel; Peptor, Israel; Pfizer, UK;

Advisor to various start-up companies in Life Sciences.

Advisor to venture capital funds reviewing projects and companies in Life Sciences.

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

1995- American association for Cancer Research.

1998- American association of immunologists.

1999- Israel Immunology Society

HONORS: Prizes awards and scholarships:

1988-1991 Ph.D. Studentship Scholarship. The Wolfson Foundation at the Weizmann Institute of Science.

1989-90 FEBS (Federation of European Biomedical Societies) Fellowship for graduate students.

1992-1993 The Rothschild Postdoctoral Fellowship Award for outstanding Ph.D. graduates.

1994 U.S. Federal Technology Transfer Award, for an outstanding scientific contribution of value to the USA. Awarded by the National Cancer Institute, National Institutes of Health, Bethesda MD.

1998-2001 The "Alon" Fellowship Award, for outstanding young scientists. Awarded by the Israel Council For Higher Education, The Israel Ministry of Education ("VATAT").

1999 Award- The L. Naftali Science Foundation for Biology and Medicine, Jerusalem, Israel.

1999-2001 The Leah and Donald Lewis Academic Lectureship award administrated by the Technion-Israel Institute of Technology.

1999-2002 The TEVA Fellowship Award for Young Scientists in Life Sciences and Medicine. Awarded by TEVA Pharmaceutical Industries Ltd. Israel.

1999-2003 Research Career Development Award (RCDA), ICRF-Israel Cancer Research Fund (USA) New-York, USA.

2000-2001 The TEVA RESAERCH GRANT AWARD, Awarded through The Israel Academy of Sciences and Humanities by TEVA Pharmaceutical Industries Ltd., Israel.

2003 Citation for excellence in teaching – Center for Promotion of Teaching- Technion

2003 The Henry Taub Prize for Excellence in Research, Awarded by the Technion Board of Governors.

2004 The Juludan Prize for Application of science and technology in medicine, awarded by the Technion.

2005 George and Eva Klein Prize for Excellence in Cancer Research, Awarded by ISF- Israel Science Foundation, The Israel Academy of Sciences and Humanities.

2006 The Hershel Rich Technion Innovation Award. Awarded by the Technion Board of Governors.

PUBLICATIONS

Theses:

- 1) M.Sc. thesis: Immunotargeting of complement to tumor cells by monoclonal antibody-complement conjugates. The Feinberg Graduate school of The Weizmann Institute of Science, 1987.
- 2) Ph.D. thesis: Molecular mechanisms of tumor cell resistance to complement-mediated immune damage. The Feinberg Graduate school of The Weizmann Institute of Science, 1993.

Research papers (peer-reviewed):

1. Reiter, Y.; and Fishelson, Z.: Tumor cell lysis by Antibody-complement conjugates. *Complement* 4:154-157, 1987.
2. Reiter, Y., and Fishelson, Z.: Targeting of complement to tumor cells by heteroconjugates composed of antibodies and of the complement C3b. *J. Immunol.* 142: 2771-2777, 1989.
3. Fishelson, Z., Kopf, E., Pass, Y., Ross, L., and Reiter, Y.: Protein phosphorylation as a mechanism of resistance against complement damage. *Prog. Immunol.* 7: 205-208, 1989.

4. Yefenof, E., Benizri, R., **Reiter, Y.**, Klein, E., and Fishelson, Z.: Potentiation of target cell sensitivity to NK lysis by antibody-C3b/iC3b heteroconjugates. *J. Immunol.* 144: 1538-1543, 1990.
5. Fishelson, Z., and **Reiter, Y.**: sublytic complement attack potentiates the resistance of tumor cells to lytic doses of complement. *Compl Infl.* 8: 150, 1991.
6. Reiter, Z., **Reiter, Y.**, Fishelson, Z., Loyter, A., Nussbaum, O., and Rubinstein, M.: ClassI MHC antigens are not associated with resistance to NK cell mediated cytotoxicity. *Immunobiol.* 183: 23-39, 1991.
7. **Reiter, Y.**, and Fishelson, Z.: Complement membrane attack complexes induces synthesis of large complement induced proteins (L-CIP) in human leukemic cells. *Mol. Immunol.* 29: 771-781, 1992.
8. **Reiter, Y.**, Cibotariu, A., and Fishelson, Z.: Sublytic complement attack protects tumor cells from lytic doses of antibody and complement. *J. Immunol.* 22: 1207-1213, 1992.
9. Brinkmann, U., **Reiter, Y.**, Jung, S.-h., Lee, B., and Pastan, I.: A recombinant immunotoxin containing a disulfide-stabilized Fv fragment. *Proc. Natl. Acad. Sci. USA* 90: 7538-7542, 1993.
10. **Reiter, Y.**, Brinkmann, U., Webber, K.O., Jung, S.-h., Lee, B.K., and Pastan, I.: Engineering interchain disulfide bonds into conserved framework regions of Fv fragment: improved biochemical characteristics of recombinant immunotoxins containing disulfide-stabilized Fv. *Protein Eng.* 7: 697-704, 1994.
11. **Reiter, Y.**, Brinkmann, U., Kreitman, R.J., Jung, S.-h., Lee, B.K., and Pastan, I.: Stabilization of the Fv fragments in recombinant immunotoxins by disulfide-stabilized Fv fragment. *Biochemistry* 33: 5451-5459, 1994.
12. **Reiter, Y.**, Pai, L., Brinkmann, U., and Pastan, I.: Antitumor activity and pharmacokinetics in mice of a recombinant immunotoxin containing a disulfide-stabilized Fv fragment. *Cancer Res.* 54: 2714-2718, 1994.
13. **Reiter, Y.**, Kreitman, R.J., Brinkmann, U., and Pastan, I.: Cytotoxic and antitumor activity of a recombinant immunotoxin composed of disulfide-stabilized anti Tac(Fv) fragment and a truncated *Pseudomonas* exotoxin. *Int. J. Cancer.* 58: 142-149, 1994.
14. **Reiter, Y.**, Brinkmann, U., Jung, S-h, Lee, K., Kasprzyk, P.G., King, C.R., and Pastan, I.: Improved binding and antitumor activity of a recombinant anti-erbB2 immunotoxin by disulfide-stabilization of the Fv fragment. *J. Biol. Chem.* 269: 18327-18331, 1994.
15. **Reiter, Y.**, Kurucz, I., Brinkmann, U., jung, S.h., Lee, B., Segal, D.M., and Pastan, I.: Construction of a disulfide stabilized TCR Fv fragment indicates that

antibody and TCR Fv frameworks are very similar in structure. *Immunity* 2: 281-287, 1995.

16. Webber, K.O., Reiter, Y., Brinkmann, U., Kreitman, R.J., and Pastan, I.: Preparation and characterization of a disulfide-stabilized Fv fragment of the anti-Tac antibody: comparison with its single-chain analog. *Mol. Immunol.* 32: 249-258, 1995.
17. Benhar, I., Reiter, Y., Pai, L., and Pastan, I.: Administration of disulfide-stabilized B1(dsFv)-PE38 and B3(dsFv)-PE38 by continuos infusion increases their efficacy in curing human tumor xenografts in mice. *Int. J. Cancer.* 62: 351-355, 1995.
18. Reiter, Y., Ciobotariu, A., Jones, J., Morgan, B.P., and Fishelson, Z.: Complement membrane attack complex, perforin, and bacterial exotoxin induce in K562 cells calcium-dependent cross-protection from lysis. *J. Immunol.* 155: 2203-2210, 1995.
19. Reiter, Y., Brinkmann, U., Jung, S-h., Lee, B., and Pastan, I.: Disulfide-stabilization of antibody Fvs: computer prediction and experimental evaluation. *Protein Eng.* 8: 1323-1331, 1995.
20. Reiter, Y., Wright, A.F., and Pastan, I.: Recombinant single-chain and disulfide-stabilized Fv immunotoxins that cause complete regression of a human colon cancer xenograft in nude mice. *Int. J. Cancer.* 67: 113-123, 1996.
21. Reiter, Y., Brinkmann, U., Lee, B.K., and Pastan, I.: Engineering antibody Fv fragments for cancer diagnosis and therapy. *Nature Biotech.* 14: 1239-1245, 1996.
22. Reiter, Y., DiCarlo, A., Engberg, J., and Pastan, I.: Peptide-specific killing of antigen-presenting cells by a recombinant antibody-toxin fusion protein targeted to MHC/peptide class I complexes with T-cell receptor-like specificity. *Proc. Natl. Acad. Sci. USA* 94: 4631-4636, 1997.
23. Reiter, Y., and Pastan, I.: Recombinant Fv immunotoxins and Fv fragments as novel agents for cancer therapy and diagnosis. *Trends in Biotech.* 16: 513-520, 1998.
24. Reiter, Y., Schuck, P., Boyde, L.F., and Plaxkin, D.: An antibody single-domain phage display library of a native heavy chain variable region: isolation of functional single-domain VH molecules with a unique interface. *J. Mol. Biol.* 290:685-98, 1999.
25. Denkberg, G., Cohen, C.J., Segal, D., Kirkin, A., and Reiter, Y.: Recombinant human single-chain MHC-peptide complexes made from *E. coli* by *in vitro* refolding: Functional single-chain MHC-peptide complexes and tetramers with tumor associated antigens. *Eur. J. Immunol.* 30: 3522-3532, 2000.

26. Reiter, Y.: Recombinant immunotoxins for targeted cancer cell therapy. *Adv. Cancer Res.* 81: 93-124, 2001.
27. Jurianz, K., Ziegler, S., Donin, N., Reiter, Y., Fishelson, Z., and Kirschfink, M.: K562 erythroleukemic cells are equipped with multiple mechanisms of resistance to lysis by complement. *Int J Cancer* 93:848-854, 2001.
28. Niv, R., Cohen, CJ., Denkberg, G., Segal, D., and Reiter, Y.: Antibody Engineering for Targeted Drug delivery: Applications for Recombinant Fv Immunotoxins and Fv fragments in Cancer Therapy and Diagnosis. *Current Pharmaceutical Biotechnology* 2: 19-46, 2001.
29. Niv, R., Pirak, E., Segal,D., Assaraf, Y., and Reiter, Y. : Targeting multi drug resistance (MDR) tumor cells with a recombinant single-chain Fv fragment directed to P-glycoprotein. *Int. J. Cancer* 94: 864-872, 2001.
30. Denkberg, G., Cohen, C.J., and Reiter, Y.: Critical role for CD8 in binding of MHC-peptide complexes to TCR: CD8 antibodies block specific binding of human tumor-specific MHC/peptide tetramers to T-cell receptor. *J. Immunol.* 167: 270-276, 2001
31. Cohen, CJ, Denkberg, G and Reiter, Y.: Generation of recombinant immunotoxins for specific targeting of tumor related peptides presented by MHC molecules. Recombinant Antibody Technology for Cancer Therapy. *Methods. Mol. Biol.* 207: 269-282, 2002.
32. Benjamin L, Plaksin, D., and Reiter, Y.: Isolation of single-domain VH antibody fragments from phage display libraries. Recombinant Antibody Technology for Cancer Therapy. *Methods. Mol. Biol.* 207: 133-143, 2002.
33. Niv, R., Segal, D., and Reiter, Y.: Construction of recombinant single-chain and disulfide-stabilized Fv immunotoxins for cancer targeting. Recombinant Antibody Technology for Cancer Therapy. *Methods. Mol. Biol.* 207: 255-268, 2002.
34. Denkberg, G., Cohen, CJ., Lev, A., Chames, P., Hoogenboom, H., and Reiter, Y.: Direct visualization of distinct T cell epitopes derived from a melanoma tumor associated antigen by using human recombinant antibodies with MHC-restricted T cell receptor-like specificity. *Proc. Natl. Acad. Sci. USA* 99: 9421-9426, 2002.
35. Lev,A., Denkberg, G., Cohen, CJ., Tzukerman, M., Skorecki, KL., Chames, P., Hoogenboom, H.,and Reiter, Y.: Isolation and characterization of human recombinant antibodies endowed with the antigen-specific, major histocompatibility complex-restricted specificity of T cells directed toward the widely expressed tumor T-cell epitopes of the telomerase catalytic subunit. *Cancer Res.* 62: 3184-3194, 2002.

36. Lev, A., Novak, H., Segal, D., and Reiter, Y.: Recruitment of CTL activity by tumor-specific, antibody-mediated targeting of single-chain class I MHC-peptide complexes. *J. Immunol.* 169: 2988-2996, 2002.
37. Denkberg, G., Kalchevsky, E., and Reiter, Y.: Specific modification of a tumor-derived peptide at an HLA-A2 anchor residue can influence the conformation of the MHC-peptide surface area: probing with T-cell receptor-like recombinant antibodies. *J. Immunol.* 169: 4399-407, 2002.
38. Cohen, CJ., Hoffman, N., Farago, M., Hoogenboom, HR., Eisenbach, L., and Reiter, Y.: Direct detection and quantitation of a distinct T cell epitope derived from tumor-specific epithelial cell-associated mucin (MUC1) using human recombinant antibodies endowed with the antigen-specific, major histocompatibility complex-restricted specificity of T cells. *Cancer Res.* 62: 5835-5844, 2002.
39. Apel, M.; Ellenhorn, J.D., Diamond, D.J. and Reiter, Y.: A functional T cell Receptor Fv capable of specific targeting to antigen presenting cells. *Cancer Immunol. Immunother.* 51: 565-573, 2002.
40. Cohen, CJ., Sarig, O., Yamano, Y., Tomaru, U., Jacobson, S., and Reiter, Y.: Direct Phenotypic Analysis of human MHC Class I Antigen Presentation: Visualization, Quantitation, and In Situ Detection of Human Viral Epitopes Using Peptide-Specific, MHC-restricted Human Recombinant Antibodies. *J. Immunol.* 170: 4349-4361, 2003.
41. Cohen C.J., Denkberg, G., Schiffenbauer, Y., Berke, G., and Reiter, Y.: Simultaneous Monitoring of Binding to and Activation of Tumor-specific T Lymphocytes by Peptide-MHC. *J. Immunol. Methods* 277: 39 – 52, 2003.
42. Denkberg, G., Lev, A., Eisenbach, L., Benhar, I., and Reiter, Y.: Selective targeting of melanoma and antigen-presenting cells using a recombinant antibody with T-cell receptor-like specificity directed toward a melanoma differentiation antigen. *J. Immunol.* 171:2197-2207, 2003.
43. Cohen C.J., Denkberg, G., Lev, A., Epel, M., and Reiter, Y.: T cell receptor-like recombinant antibodies: New tools for the study antigen presentation and TCR-peptide-MHC interactions. *J. Mol. Recog.* 16: 324-332, 2003.
44. Biddison, W.E., Turner, R.V., Lev, A., Cohen, CJ., and Reiter, Y.: Tax and M1 peptide/HLA-A2-specific Fabs and T Cell Receptors Recognize non-identical Structural Features on peptide/HLA-A2 complexes. *J. Immunol.* 171: 3064-74 2003.
45. Haus-Cohen, M., Assaraf, Y., Benhar, I., and Reiter, Y.: Disruption of P-glycoprotein (Pgp) Anticancer Drug Efflux Activity by a Small Recombinant Single-chain Fv Antibody Fragment Targeted to an Extracellular Epitope. *Int. J. Cancer* 109: 750-758; 2004.

46. Oh, S., Terabe, M., Pendleton, D.C., Bhattacharyya, A., Bera, T., Epel, M., Reiter, Y., Phillips, J., Linehan, J., Pastan, I., and Berzofsky, J.A.: Human CTL to wild type and enhanced epitopes of a novel prostate and breast tumor-associated protein, TARP, lyse human breast cancer cells. *Cancer Res.* 64: 2610-8, 2004.

47. Binyamin, L., Assaraf, Y.G., and Reiter, Y.: Targeting an extracellular epitope of Multi Drug Resistance Protein 1 (MRP1) by a small recombinant single-chain Fv antibody. *Int. J. Cancer* 110:882-890, 2004.

48. Yamano, Y., Cohen, C.J., Tomaru, U., Li, H-C., Takenouchi, N., Biddison, W., Reiter, Y., and Jacobson, S.: Increased expression of HTLV-1 Tax11-19 peptide/HLA-A*201 complexes on CD4+CD25+ T cells detected by TCR-like antibodies in patients with HTLV-1 associated neurologic disease. *J. Exp. Med.* 199: 1367-1377, 2004.

49. Zehn, D., Cohen, C.J., Reiter, Y., and Walden, P.: Extended presentation of specific MHC-peptide complexes by mature dendritic cells compared to other types of antigen-presenting cells. *Euro. J. Immunol.* 34:1551-1560, 2004.

50. Lev, T., Noy, R., Oved, K., Novak, H., Segal, D., Walden, P., Zehn, D., and Reiter, Y.: Tumor-Specific Antibody-Mediated Targeting of MHC-Peptide Complexes Induces Regression of Human Tumor Xenografts *In Vivo*. *Proc. Natl. Acad. Sci. USA* 101: 9051-9056, 2004.

51. Held, G., Matsuo, M., Gnjatic, S., Epel, M., Ritter, G., Yull, S., Tai, T., Cohen, C.J., Old, L.J., Pfreundschuh, M., Reiter, Y., Hoogenboom, H.R., and Renner, C.: Dissecting cytotoxic T cell responses towards the NY-ESO-1 protein by peptide-MHC specific antibody fragments. *Eur. J. Immunol.* 34: 2919-2929, 2004.

52. Oved, K., Lev, A., Noy, R., Segal, D., and Reiter, Y.: Antibody-mediated targeting of human single-chain class I MHC with covalently linked peptides induces efficient killing of tumor cells by tumor or viral-specific cytotoxic T lymphocytes. *Cancer Immunol. Immunother.* 54:867-79, 2005.

53. Kummer, M., Lev, A., Reiter, Y., and Biedermann, B.C.: Vascular Endothelial Cells Have Impaired Capacity to Present Immunodominant Antigenic Peptides - a Mechanism of Cell-type Specific Immune Escape. *J. Immunol.* 174: 1947-1953, 2005.

54. Binyamin, L., Assaraf, Y.G., and Reiter, Y.: ATP-dependent binding of a scFv antibody fragment directed to an extracellular epitope of the multi drug resistance protein 1 (MRP1) on live cells: implication for ATP-dependent conformational changes. *Int. J. Cancer*. 116: 703-9, 2005.

55. Tzukerman M., Rosenberg T., Reiter I., Ben-Eliezer S., Denkberg G., Coleman R., Reiter Y., and Skorecki K: (2006). The Influence of a Human Embryonic Stem Cell Derived Microenvironment upon Targeting of Human Solid Tumor Xenografts. *Can. Res.* 66: 3792-3801, 2006.

56. Artzi, A., Benhar, I., **Reiter, Y.** and Sivan, U.: Antibody Molecules Discriminate between Crystalline Facets of a Gallium Arsenide Semiconductor. *Nano letters*. 6:1870-1874, 2006.

57. Zehn, D., Cohen, C.J., **Reiter, Y.**, and Walden, P. Efficiency of peptide presentation by dendritic cells compared to other cell types: Implications for cross-priming. *Int. Immunol.* 18:1647-54, 2006.

58. Novak, H., Wels, W., Zehn, D., and **Reiter, Y.**: Antibody- mediated selective targeting of antigenic MHC-peptide complexes induces efficient killing in vitro and in vivo of EGFR1-expressing tumor cells by tumor or viral-specific cytotoxic T lymphocytes. *Int. J. Cancer* 120:329-36. 2007.

59. Oved, k., Ziv, O., Jacob-Hirsch, J., Novak, H., Makler, O., Denkberg, G., Sinik, K., Segal, D., Noy, R., Gefen-Dor, C., Amariglio, N., Rechavi, G., and **Reiter, Y.** A Novel Post Priming Regulatory Check Point of Effector/Memory T cells Dictated Through Antigen Density Threshold-dependent Anergy. *J. Immunol.* 178:2307-17, 2007.

Review papers:

60. **Reiter, Y.**, and Pastan, I.: Antibody engineering of recombinant Fv-immunotoxins for improved targeting of cancer. *Clin. Cancer Res.* 2: 245-252, 1996.

61. **Reiter, Y.**, Brinkmann, U., Lee, B.K., and Pastan, I.: Engineering antibody Fv fragments for cancer diagnosis and therapy. *Nature Biotech.* 14: 1239-1245, 1996.

62. **Reiter, Y.**: Recombinant immunotoxins for targeted cancer cell therapy. *Adv. Cancer Res.* 81: 93-124, 2001.

63. Noy, R., Epel, M., Haus-Cohen, M., Klechevsky, E., Makler, O., Michaeli, Y., Denkberg, G., and **Reiter, Y.**: T cell receptor-like antibodies: novel reagents for clinical immunology and immunotherapy. *Expert. Rev. Anticancer Ther.* 5: 523-536, 2005.

64. Shadel, O., and **Reiter, Y.**: Antibodies and their fragments as anticancer agents. *Curr Pharm Des.* 12: 363-378, 2006.

65. Denkberg, G., and **Reiter, Y.**: Recombinant antibodies with T-cell receptor-like specificity: Novel tools to study MHC class I presentation. *Autoimmunity Rev.* 5: 252-257, 2006.

66. Michaeli, Y., and **Reiter, Y.**: Optimized Fc variants with enhanced effector function. *Expert Opin. Ther. Patents* 16:1449-1452, 2006.

Book Chapters:

67. Reiter, Y., and Fishelson, Z.: Killing of human tumor cells by antibody-C3b conjugates and human complement. In Radwell, J.D. (Ed.): Targeted Antibodies for Diagnosis and Therapy. New York, Marcel Dekker Inc., 1989, pp. 119-135.
68. Fishelson, Z., and Reiter, Y.: Monoclonal Antibody-C3b conjugates: killing of K562 cells and selection of a stable complement resistant variant. In Grogoman, J., Evans, C., and Golde, D. (Eds.): Mechanisms of Action and Therapeutic Application on Biologicals in Cancer and Immune Deficiency Disorders. New York, Alan R. Liss, Inc., 1989, pp. 272-282.
69. Reiter, Y., Lee, B.K., and Pastan, I.: Disulfide stabilized Fvs. In: Antibody Engineering: technologies and applications. IBC Biomedical Library Series, IBC press. Pp. 147-169, 1996.
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